

287047

JPRS 81543

16 August 1982

# Worldwide Report

EPIDEMIOLGY

No. 290

19981208 041

DISTRIBUTION STATEMENT A

Approved for public release  
Distribution Unlimited

**FBIS**

FOREIGN BROADCAST INFORMATION SERVICE

Reproduced From  
Best Available Copy

3  
48  
A03

#### NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [ ] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

16 August 1982

WORLDWIDE REPORT  
EPIDEMIOLOGY

No. 290

## CONTENTS

## HUMAN DISEASES

## BAHRAIN

- Causes of Typhoid Epidemic Investigated  
(Elizabeth Kirkwood; GULF MIRROR, 10 Jul 82)..... 1

## GUYANA

- Briefs  
Rise in Malaria 3

## INDIA

- Jhansi College Studies Waterborne Diseases  
(PATRIOT, 6 Jul 82)..... 4

- Report Reveals Malaria Declining in India  
(PATRIOT, 26 Jun 82)..... 5

- Briefs  
Nagpur Declared Cholera Infected 6  
Jalpaiguri 'Malignant Malaria' 6  
'Mystery' Disease in Jalpaiguri 6  
Anticholera Drive 7  
Manipur Cholera Outbreak 7  
New Mystery Disease 7

## JAMAICA

- Briefs  
Typhoid Increase 8

## LAOS

### Briefs

Vientiane District Malaria Work	9
Champassak Malaria Outbreak	9
Champassak Antimalaria Campaign	9

## MALAYSIA

Cholera Epidemic Continues in Sarawak (NEW STRAITS TIMES, 24 Jun 82).....	11
Increase in Incidence of Dengue Fever Since April (NEW STRAITS TIMES, 3 Jul 82).....	12

## NEPAL

### Briefs

Salyan District Gastroenteritis Deaths	13
Cholera in Salyan District	13

## NICARAGUA

### Briefs

Elephantiasis Outbreak Around Lake Managua	14
Typhoid Cases	14

## PAKISTAN

Leprosy Center's Financial Problems Discussed (Lionel Andrades; MORNING NEWS, 14 Jul 82).....	15
--------------------------------------------------------------------------------------------------	----

## PHILIPPINES

Pneumonia Cases Up in Metro Manila (BULLETIN TODAY, 24 Jul 82).....	18
Pneumonia Top Killer in Visayans (BULLETIN TODAY, 24 Jul 82).....	19
Goiter Cases Rising (Marcia C. Rodriguez; BULLETIN TODAY, 20 Jul 82).....	20
Malaria Mosquito Campaign Urged (BULLETIN TODAY, 18 Jul 82).....	21
Briefs	
Diarrhea Cases Up	22

## SOUTH AFRICA

### Briefs

Polio Deaths in Gazankulu	23
Effective Anti-Polio Campaign	23

## SRI LANKA

### Briefs

Diarrhoea Outbreak Warning	24
Malaria Epidemic Reported	24
Flu, Bronchitis Epidemic in Colombo Area	24
Shigella Virus Spread Reported	24
Hepatitis Hits Nawalapitiya	25

## TANZANIA

Health Minister Notes Incidence of Various Diseases (DAILY NEWS, 17 Jul 82).....	26
-------------------------------------------------------------------------------------	----

## ANIMAL DISEASES

## DENMARK

### Briefs

Rabies Program Ending	27
-----------------------	----

## INDIA

Tuberculosis, Other Diseases Found in Zoo Animals (PATRIOT, 12 Jul 82).....	28
--------------------------------------------------------------------------------	----

## LAOS

### Briefs

Foot-and-Mouth Disease Control Effort	29
Savannakhet Veterinary Work	29

## MALAYSIA

Hemorrhagic Septicemia Reported in Kelantan State (NEW STRAITS TIMES, 30 Jun 82).....	30
------------------------------------------------------------------------------------------	----

## NICARAGUA

Measures Being Taken To Combat Cattle Disease (EL NUEVO DIARIO, 1 Jul 82).....	31
-----------------------------------------------------------------------------------	----

SRI LANKA

Efforts To Halt Cattle Diseases Reported (DAILY NEWS, 9 Jul 82).....	33
-------------------------------------------------------------------------	----

ZAMBIA

Secretary Zulu Discusses Cattle Diseases Prevention, Vaccines (DAILY MAIL, 24 Jul 82).....	34
-----------------------------------------------------------------------------------------------	----

PLANT DISEASES AND INSECT PEST

DENMARK

Colorado Beetles Found in Potato Field (BERLINGSKE TIDENDE, 16 Jul 82).....	35
--------------------------------------------------------------------------------	----

Briefs Miner Flies Threaten Crops	36
--------------------------------------	----

PAKISTAN

Briefs Locust Swarms Destroyed	37
-----------------------------------	----

PHILIPPINES

Briefs Locusts Threaten Leyte Rice Crop	38
--------------------------------------------	----

SWEDEN

Meligethes Aeneus Beetle Destroying Rapeoil Crops (Karin von Schenck; SVENSKA DAGBLADET, 28 Jun 82).....	39
-------------------------------------------------------------------------------------------------------------	----

## CAUSES OF TYPHOID EPIDEMIC INVESTIGATED

Manama GULF MIRROR in English 10 Jul 82 p 3

[Article by Elizabeth Kirkwood]

[Excerpt]

**THE search for the source of Bahrain's typhoid outbreak has not yet revealed any one particular cause, according to the Ministry of Health.**

Officials are concentrating on several potential sources, including contamination of the water supply in some areas, home-made ice-cream, open sewage, abandoned rubbish and actual carriers of the disease.

There have been 160 cases to date, of which 104 have occurred since the beginning of May. Only about one-third of the cases have been among expatriate workers.

### **Reduced**

"The pattern of cases is widespread," said the assistant under-secretary for preventative and primary health care, Dr Ibrahim Yacoub. "But there has been none in East Rifa'a or Budaiya. We are concerned mainly with the area between Jidhafs and Budaiya and Ras Roman."

After a widespread immunisation programme the number of new cases has been reduced to a trickle. "Last week there was only one new case every other day," Dr Yacoub explained.

"Most of the people in the three isolation wards at Sulmaniya Medical Centre have been discharged."

The Ministry of Health's efforts to track down the source of the disease started with the food handlers in Bahrain's 1,000 plus eating establishments.

"We check the restaurants every week at the moment," Dr Yacoub said. "We give all the food handlers stool and chest examinations, and we take samples of the water and any suspicious-looking food. Thank goodness we have not found any typhoid carriers among the food handlers."

Water is another top priority. "We check the wells especially, and if we find any cracks in the water pipes, we take samples of water from before and beyond the crack to see whether it is polluted. We are checking the infected areas every day, and other areas about once every two days," Dr Yacoub explained.

### **Sewage**

"We also look for open sewage and garbage which is attracting flies, and with the co-operation of other ministries, ensure that these problems are dealt with," he added.

Immunisation has been an important factor in controll-

ing the disease! The vaccination used will give 70 per cent protection, but Dr Yacoub hopes that a new and more effective oral vaccine currently being developed will be available in Bahrain in the future. This would make it possible to immunise the entire population, and would be cheaper as it would not require the manpower needed for vaccination.

"Whenever we find a typhoid case, we encircle the area and check for carriers. We also go to the place of work and check there," Dr Yacoub said. Astonishingly, we have only found two or three carriers so far."

One thing that is bothering officials is domestic servants, who are beyond the reach of the Ministry of Health's routine examinations. "We would like to introduce a system whereby people are granted entry visas only, then after a full medical examination are allowed to get a work permit," Dr Yacoub explained.

"Bahrain is classified as a developed country by the World Health Organisation as far as health care is concerned," he added. "That is why we are making such efforts to locate the source of the disease. We should be able to eradicate completely these infectious diseases, and that is our aim."

CSO: 5400/4734



GUYANA

BRIEFS

RISE IN MALARIA--Reports from the interior state that malaria is on the rise. A very reliable medical source in the Rupununi said that the number of malaria cases has risen to 1,000 in the North and South Savahhahs. During the budget debate this year spokesperson for health for the PPP, Janet Jagan accused the government of not continuing the medicated salt programme which had completely eradicated malaria when she was health minister. She warned that malaria would be on the increase once medicated salt was not distributed regularly in the interior and border areas. Since then the number has blown upwards. [Text] [Georgetown MIRROR in English 13 Jun 82 p 4]

CSO: 5400/7571

## JHANSI COLLEGE STUDIES WATERBORNE DISEASES

New Delhi PATRIOT in English 6 Jul 82 p 10

[Text]

JHANSI, July 5 (UNI).  
**S**TARTLINGLY high rates of water-borne diseases have been recorded in the rural population of Bundelkhand division, by a WHO-sponsored study currently being carried out by the department of social and preventive medicine, MLB Medical College, Jhansi.

Prof R N Srivastava, the principal investigator of the project, stated that almost everyone in the surveyed population suffered from a water-related disease.

During the period of one year, the overall incidence of all such diseases sometimes far exceeded hundred per cent (125.7 per cent).

The most frequently encountered condition was enteric fever (46.2 per cent), followed by conjunctivitis (42.8 per cent). Other diseases in order of frequency were diarrhoea (19.3 per cent), dysentery (11.1 per cent), scabies (5.1 per cent) and jaundice (0.6 per cent).

The magnitude of the problem became more unnerving when the total number of spells of these illnesses were computed. It was seen that several persons suffered repeatedly from the same illnesses over the year.

The overall annual incidence of spells of sickness came to almost 200 per cent. Enteric fever was again on top (70.3 per cent), conjunctivitis (69.5 per cent) coming a close second, followed by diarrhoea (33.6 per cent).

To unfold the factors behind such high rates of water related diseases, the quality and quantity of water available in the community were studied in detail. The most common source of water were open wells, whose water remained highly contaminated throughout the year.

There were a few privately-owned (domestic) hand pumps. Being shallow, their water too was contaminated and unfit for human consumption in most instances.

CSO: 5400/7093

## REPORT REVEALS MALARIA DECLINING IN INDIA

New Delhi PATRIOT in English 26 Jun 82 p 5

[Text]

The incidence of malaria in the country has considerably declined since the adoption of the modified malaria control plan in 1976, reports UNI.

According to an official report, the malaria cases which were about six million in 1976, came down to 2.5 million during 1981.

During 1981 malaria claimed 164 lives as against 207 in 1980 and 198 in 1979.

To control the spread of *P. falciparum* infection, responsible for the fatal cerebral malaria, the National Malaria Eradication Programme is being supplemented by *P. falciparum* containment programme in areas where the incidence of this type of malaria is considerably high.

Infection of *P. falciparum* type of malaria has shown a certain amount of resistance to the commonly used anti-malaria drug, chloroquine, in different parts

of the country.

To combat this strain, six monitoring teams had been set up by the Union Ministry of Health and Family Welfare.

One team is testing alternate drugs wherever resistance to chloroquine has been detected in the *P. falciparum* strains.

Meanwhile, the Ministry of Health and Family Welfare is considering a proposal for the inclusion of seven new towns during 1982-83 under urban malaria scheme to provide protection against the disease.

At present 430 lakh people of 125 towns are being protected against malaria and other mosquito borne diseases.

Other mosquito borne diseases included kala-azar, which was reported in West Bengal, Bihar, Assam and Delhi. Bihar reported 13,700 kala-azar seizures, of which 37 proved fatal.

CSO: 5400/7088

## BRIEFS

NAGPUR DECLARED CHOLERA INFECTED--NEW DELHI, 6 July--Nagpur in western coastal Maharashtra State was today officially declared as "cholera infected", the Press Trust of India (PTI) reported. The agency, however, said the official declaration was made as a precautionary measure amid conflicting reports about the incidence of the disease. Local newspapers in Maharashtra's second largest city after Bombay, were said to have reported this morning detection of cholera cases but this was denied by civic health officials. Other official sources quoted by PTI said five cases of gastro-enteritis had been reported in a hospital and that an intensive anti-cholera drive had been launched. [Rangoon THE WORKING PEOPLE'S DAILY in English 8 Jul 82 p 3]

JALPAIGURI 'MALIGNANT MALARIA'--Five of the 99 Jalpaiguri people who died of a "mysterious disease", had suffered from malignant malaria, say reports received by the State Health Department. According to Mr Nani Bhattacharya, Health Minister, malaria in four Jalpaiguri blocks--Dhupguri, Madarihat, Falakata and Nagrakata--has assumed "epidemic" proportions. About five lakh people live there. Mr Bhattacharya said at Writers Building on Monday that reports showed that the people who had died of the so-called mysterious disease and not exactly of the malignant malaria virus, must have been suffering from other diseases when they caught malaria. The exact nature of the disease has not been determined till now. So far, 63 people had died at Dhupguri, 34 at Madarihat and two at Kumargram. The Health Minister said steps were being taken on a "war footing" to fight the epidemic. A camp hospital had been set up at Dhupguri. Over 60 spraying teams would operate in 11 blocks of the district. Additional supervisory staff were appointed in the worst-affected blocks. The Health Minister said transporting medicines was a problem. [Calcutta THE STATESMAN in English 29 Jun 82 p 3]

'MYSTERY' DISEASE IN JALPAIGURI--JALPAIGURI, July 1--The mystery surrounding the disease now raging in all the 13 blocks of Jalpaiguri district remains to be solved. One hundred and nine people have died of the disease. Opinions vary as to whether this disease is caused by the malaria virus. According to Dr. B. N. Tripathy, Chief Medical Officer of Health, Jalpaiguri, the disease broke out in last week of April in the 18 villages of Dhupguri block in the Dooars. It spread gradually to Madarihat, Falakata, Nagrakata Kumargramduar and Alipurduar block 1. 44 villages were affected. Of these six blocks Dhupguri was the worst hit with 655 malaria cases, 65 deaths. The number of cases in Madarihat was 560, in Falakata 182, in Nagarkata 62, in Kumargramduar 114 and in Alipurduar block 1 172. The number of deaths in Madariht was 36,

Falakata 13, Kumargramduar two and Alipurduar three. For a proper investigation of the causes of the disease and for controlling its spread, teams of experts from the School of Tropical Medicine, Calcutta, World Health Organization, and the Health Services Directorates, as well as the State and Central Zonal Malaria Officers of the Presidency Division had visited the affected areas. Till now, the investigation had revealed five cases of malignant malaria, and it was suspected that there might be "some kalazar cases". Dr Tripathy said that those affected died within five to seven days. They could not stand the drugs administered to them because of malnutrition. To overcome this problem, free rice, wheat and milk powder were being distributed through the panchayats. The affected areas being close to forests might have been subject to some other "carriers besides mosquitoes. An investigation on this line of thought had also been undertaken. A camp hospital had been set up at Kuttimari village in Dhupguri and spraying of insecticide in the affected areas had been intensified. [Calcutta THE STATESMAN in English 2 Jul 82 p 9]

ANTICHOLERA DRIVE--Mr Asoke Bose, Commissioner, Calcutta Corporation, has directed all departments concerned to intensify anti-cholera drives and to flush and disinfect had tubewells and wells in Kustia, Topsia, Tiljala and Golan Zilani Khan Road in the eastern suburb of Calcutta within a week. The Commissioner, the Health Officer and other senior civic officials visited on Thursday the areas of the eastern suburbs, where eight people, suspected to be suffering from gastro-enteritis and cholera, had been admitted to hospital. The Health Officer said on Friday that adequate measures have been initiated and not a single fresh case from the area was reported. He said that there was "no cause for panic". [Calcutta THE STATESMAN in English 3 Jul 82 p 12]

MANIPUR CHOLERA OUTBREAK--IMPHAL, July 4 (UNI)--Fifteen people have died and more than 500 are in a serious condition following an outbreak of cholera in an epidemic form in the Sadar Hill areas of Manipur. A joint statement issued today by the headmen of the affected villages said if the government did not take immediate steps, the death toll would shoot up. The epidemic has been raging the area for the past few days. [Bombay THE TIMES OF INDIA in English 5 Jul 82 p 4]

NEW MYSTERY DISEASE--JALPAIGURI, July 5--Another mysterious disease, with symptoms of retraction of breast in women and high temperature, acute abdominal pain and headache in both men and women, has broken out here. The earliest cases here reported from Dhupguri, Maynaguri in the Dooars five days ago. The disease has now spread to the town. According to a physician at Jalpaiguri Sadar Hospital, the disease, called the "Koro syndrome", is rampant in south China but this is the first time that it has struck here. Over 40 people, including three women, have been admitted to Sadar Hospital since Sunday. [Calcutta THE STATESMAN in English 6 Jul 82 p 16]

CSO: 5400/7093

## BRIEFS

TYPHOID INCREASE--At least 12 cases of typhoid have been reported in the Corporate Area so far this month, the Gleaner learned yesterday. The cases are reported to be widely distributed. Cases to date are "way above" the monthly typhoid reports for the Corporate Area, the Gleaner was told by knowledgeable sources. Public Health inspectors are investigating the matter. News of the increased incidence of typhoid surfaced at the monthly meeting of the Kingston and St Andrew Corporation's Public Health Committee meeting yesterday. Dr Peter Figueroa, Medical Officer of Health reported to the meeting that "one or two" additional cases of typhoid had been reported. Dr Figueroa said that the increase was likely due to the water lock-offs. He promised to provide more details at the committee's next meeting. Questioned about the increase in typhoid for July, Dr Figueroa told the Gleaner that he was not in a position to say how many cases had been reported. However, he agreed that if the figure was in the region of 12 or even six it would be "cause for concern." Dr Figueroa said that with the water lock-offs making it difficult to maintain general sanitary conditions, the situation regarding typhoid was "not surprising." [Text] [Kingston THE DAILY GLEANER in English 21 Jul 82 p 2]

CSO: 5400/7571

## BRIEFS

VIENTIANE DISTRICT MALARIA WORK--From 1 April to 27 May cadres of the public health service of Kasi District, Vientiane Province, effectively succeeded in giving shots for disease prevention in the rainy season and for suppressing malaria in the production bases in the three cantons of Hin Ngon, Na Mon, and Ban Chiang subordinate to Kasi District. The reason for this is to maintain the good health of the people in that region so they will be able to take part in making this rainy season's production to the fullest extent. To carry out this work they divided themselves into three groups with eight in each group. Each group was responsible for its own detailed specialized task. They attentively performed their actual work in that period, and they were able to spray 1,295 kg of DDT and give out a total of 7,600 tablets of antimalaria medicine to all the people in the three cantons.

[Text] [Vientiane VIENTIANE MAI in Lao 4 Jun 82 p 1] 9884

CHAMPASSAK MALARIA OUTBREAK--[KH. P. L.] At the end of April the Public Health Unit of Soukhouma District, Champassak Province, rushed to send its cadres for specialized tasks to join the people in suppressing malaria immediately after it heard the news of the malaria outbreak in Hatsaimoun Canton, Soukhouma District, Champassak Province. They carried out this work successfully. They sprayed DDT along drainage ditches in housing areas in many different localities. Meanwhile, they examined and gave out antimalaria medicine to more than 470 families, and also taught them the three clean sanitation principles and malaria prevention techniques. This helped to gradually decrease the sickness among the people in that area.

[Text] [Vientiane KHAOSAN PATHET LAO in Lao 26 May 82 p A2] 9884

CHAMPASSAK ANTIMALARIA CAMPAIGN--[KH. P. L.] To follow the policy aimed at serving the bases in production and to make malaria prevention a primary task and treatment an important responsibility, early last April the malaria treatment and eradication branch of the Public Health Unit of Champassak Province sent a number of specialized task cadres to work together with cadres from 10 district Public Health Units around the province. Their purpose was to spray DDT for malaria suppression in many different localities in rural areas of their own responsibility. In carrying out the actual work they succeeded in spraying DDT in many localities. For example, in Phon Thong District having 32 cantons they were able to train over 200 more sanitation combatants and examined

and found malaria in 256 people. In Sanasomboun District they succeeded by 100 percent in spraying DDT and more than 27,000 people received antimalaria medicine. In the Khong District area alone, in the two cantons of Mauangsen and Khouanphapheng, over 1,000 households were successfully sprayed and over 6,700 people received antimalaria medicine. Right now DDT spraying for malaria suppression in different districts all over Champassak Province is still widely and effectively continuing. This is aimed at maintaining good health for all people so they will be able to determinedly contribute their physical labor for good rice production this year. [Text] [Vientiane KHAOSAN PATHET LAO in Lao 31 May 82 p A4] 9884

CSO: 5400/5661



CHOLERA EPIDEMIC CONTINUES IN SARAWAK

Kuala Lumpur NEW STRAITS TIMES in English 24 Jun 82 p 6

[Text]

**KUCHING, Wed. —** There is no sign that the cholera epidemic in Sarawak's Sixth Division which claimed three lives since its outbreak early this year will end soon.

Another two confirmed cases and 16 carriers were reported in the last 48 hours, bringing the total number of confirmed cases to 32 and carriers to 95.

A spokesman of the State Medical Services Department said today the confirmed cases were a 43-year-old man from Rumah Enggi, in Sarikei district and a 49-year-old man from Kampung Sekaan Besar, Matu.

The carriers were all from Kampung Betanak, Tekajong in Matu Daro district.

The spokesman reminded the people in affected areas to observe strict personal hygiene to help prevent the spread of the disease.

They should also refrain from visiting other places. — Bernama.

CSO: 5400/8427

# INCREASE IN INCIDENCE OF DENGUE FEVER SINCE APRIL

Kuala Lumpur NEW STRAITS TIMES in English 3 Jul 82 p 10

[Text]

**KUALA LUMPUR, Fri.** — The incidence of dengue fever and dengue hemorrhagic fever in the country has worsened in the first half of this year compared to the same period last year.

Outbreak of both diseases are now being reported every week especially in Selangor, Federal Territory, Perak, Penang, Negri Sembilan and Kelantan.

Director of Health Services in the Health Ministry Datuk Dr Ezaddin Mohamed, who disclosed this today, said these cases had increased since

April.

Until June this year, 395 cases (241 dengue fever cases and 154 dengue hemorrhagic fever) resulting in 16 deaths were reported compared with 317 cases resulting in nine deaths during the same period last year.

## Highest

Datuk Dr Ezaddin urged the public to co-operate with the authorities to check the outbreak of the disease. They should destroy breeding places of mosquitoes with abate. Selangor registered the

highest number of cases this year with 33 dengue hemorrhagic fever cases and 62 dengue fever cases with four deaths.

The Federal Territory has the biggest number of deaths (six cases) although the number of cases stood at 80.

The second highest number of cases is Johore (92 cases) with one death reported. Perak has 54 cases (two deaths), Penang 31 cases (one death).

The latest victim in Penang was a 13-year-old boy who died on June 29 in Jalan Beach. — Bernama.

CSO: 5400/8427

NEPAL

BRIEFS

SALYAN DISTRICT GASTROENTERITIS DEATHS--Salyan, July 16--Thirty-nine persons are reported to have died of gastro-enteritis in two village panchayats of Salyan district. Eleven persons died of gastro-enteritis in Bagalupur Village Panchayat and twelve persons in Ward No 5 and sixteen persons in Ward No 7 of Suikot Village Panchayat of the district on July 11, it is learnt. Others suffering from the disease have been provided medicine, it is learnt from the Chief District Officer.--RSS [Text] [Kathmandu THE MOTHERLAND in English 17 Jul 82 p 1]

CHOLERA IN SALYAN DISTRICT--Salyan, July 22--Rastriya Panchayat Chairman Marich Man Singh visited Salyan district Tuesday to study the foodgrain situation. He also visited the cholera affected areas, reports RSS. Mr Singh returned to Kathmandu yesterday. [Text] [Kathmandu THE RISING NEPAL in English 23 Jul 82 p 1]

CSO: 5400/5701

## NICARAGUA

### BRIEFS

ELEPHANTIASIS OUTBREAK AROUND LAKE MANAGUA--An outbreak of "Culex" larvae that transmit the disease known as elephantiasis is currently being countered by Action and Control of Malaria Program teams. The head of this program's Zone One, Manuel Ruiz, indicated that the outbreak is quite severe and that it appears above all on the shores of Lake Managua and around the numerous ponds that have developed in the capital. Ruiz explained that elephantiasis causes a disproportionate inflammation of the feet, which results in their looking like elephants' feet, whence the name of the affliction. He said that teams are spraying the banks of the lake and the ponds with great quantities of insecticides. This type of larva grows easily in putrid water. This is why the people are advised to prevent water from stagnating in courtyards, the interior of houses, and other places. Manuel Ruiz said that the incidence of malaria has been notably lower in recent months. From January to May of this year more than 600 plates were examined, showing only 60 positive cases, said Ruiz. At present an anti-malaria campaign is being carried out in some 56 districts of the capital. The people are being administered primaquine and chloroquine. We are strengthening last year's national anti-malaria campaign, said the informant. He said that the citizenry appears more receptive to the program and that there is no rejection of the anti-malaria treatment. "Last year there were problems connected with persons who, because of lack of education or poor orientation, did not submit to the treatment," concluded Ruiz. [Text] [Managua LA PRENSA in Spanish 23 Jun 82 p 7] 8255

TYPHOID CASES--Matagalpa--Eleven cases of typhoid were found in various districts of the city, which impelled the Epidemiology Department of the Fifth Regional Department of Health to take immediate action to prevent the spreading of the disease. This report was made by Dr Feliza Solange, Head of the MINSA [Ministry of Health] branch in Matagalpa. She explained that the first cases were reported in the districts of the western part of the city, including Solingalpa. The most recently reported case occurred in the Guanuca district, which is an indication that the disease is spreading to other parts of the locality, said Dr Solange. The Epidemiology Department implemented a massive vaccination campaign with the participation of mass organizations, which since Sunday have brought quantities of medicine to the districts in which the disease has been detected. Going more into detail, she said that the recent floods caused by the storm were partly responsible for the typhoid. [Text] [Managua BARRICADA in Spanish 10 Jun 82 p 9] 8255

LEPROSY CENTER'S FINANCIAL PROBLEMS DISCUSSED

Karachi MORNING NEWS in English 14 Jul 82 p 5

[Article by Lionel Andrades]

[Text] Leprosy treatment and rehabilitation of lepers all over the country may be drastically curtailed because the major leprosy centre in the country is in financial difficulties.

The treatment of lepers in the rural and tribal areas of the country may be discouraged because the Marie Adelaide Leprosy Centre (MAC) cannot maintain an average expenditure of about seven lakh rupees a month.

Last year with an annual expenditure of Rs. 75,80,614 paid mainly through foreign assistance, lepers were treated all over the country.

The German Leprosy Relief Association (GLRA), however, which has been financing the fight against leprosy in Pakistan, has informed the MAC that due to world recession and other financial difficulties the MAC cannot depend upon the financial assistance of the GLRA for the next financial year.

There are about 35,000 lepers in need of medical treatment. Treatment is being provided to 23,000 lepers with the MAC services reaching 18,000 patients and the Red Crescent, the KMC and other agencies treating the remaining 5,000 patients.

The MAC also provides assistance to the Government leprosy centres in the form of medicines and technicians. All para-medics receiving a salary from the Government also receive a stipend from the MAC for leprosy treatment.

Remote Areas

Dr Thomas Chiang, Medical Director, MAC said he could not imagine what would become of treatment for leprosy patients in the mountains, deserts and tribal areas of the country.

The local fund collection drive has diminished, he said, and local donations through voluntary agencies barely meet 10 percent of the costs.

If the funds stop coming the work will just have to stop and the problem will have to be placed on the Government's lap, he said. The Government will have to get the sponsors if the work is to continue.

Initially the treatment of lepers in the remote areas of the country will have to be stopped, it is learnt, if funds are not available.

The MAC, it may be mentioned, has been recognised by the Central Government as the National Training Institute for Leprosy Technicians. Technicians for leprosy work are being trained by the MAC since 1965. Off Shahrah-i-Liaquat near the Regal bus stop, it has also been a charitable institute maintained on donations that are income-tax exempted.

The leprosy centre has presently six sub-centres in Karachi. At Korangi they are treating 1866 patients, Malir (1640), Orangi (1222), Lalukhet (1029), Bihar Colony (482) and Baldia (176 patients).

In rural Sind they have four centres, besides, the MAC provides medical supervision to over 50 Leprosy Control Units established all over the country by the Provincial Government.

For the larger centres, transport and POL expenses are also provided and since the disease carries a distinctive stigma, leprosy workers even those attached to the Government are given a monthly stipend to motivate them to stay on.

Aside from the leprosy treatment, the MAC has a rehabilitation training centre where free training to groups of 45 women are provided in various trades.

A Swiss physiotherapist provides treatment to the patients from all the centres including children with polio from the Baldia General Health Centre.

With the regular funds not available, the MAC will have to face a situation in which they will have to reconsider providing OPD, physiotherapy, blood transfusions, X-Ray, child specialist and optometrist services. In the next stage surgical operations and reconstructive surgery could be hampered.

#### Social Services

It is also unlikely that the social department of the MAC will be able to maintain its previous performance. Since (1976-1981), 176 houses for refugees from mostly Bangladesh were provided. For tuberculosis patients, 30 houses were built and for destitute patients an additional 38 houses were built.

Business loans were provided to 114 patients so that they could start a business and earn their own livelihood. The loans amounted to Rs. 3,30,000.

For the purchase of equipment, instruments and apparatus 65 loans were given amounting to Rs. 1,23,000 and about 70 patients receive a regular monthly dole for their upkeep which amounts to Rs 6,300 per month.

The MAC hospital is managed exclusively by Pakistanis and 50 percent of the 77 employees of the MAC's main centre are leprosy patients or family members supporting leprosy patients.

At a time when large expenditures are made on luxury items and on non-essential goods, funds for primary health treatment are ironically unavailable.

When estimated millions of rupees are spent on cosmetics and related products, health sources express their anger and disgust at the "poorest of the poor" having to go without the essential treatment while parts of their body literally rot.

CSO: 5400/5698

PNEUMONIA CASES UP IN METRO MANILA

Manila BULLETIN TODAY in English 24 Jul 82 p 32

[Text]

Pneumonia cases have increased in Metro Manila and nearby towns and cities, the Ministry of Health reported yesterday.

The ministry's disease intelligence center said 204 patients suffering from pneumonia, a contagious lung disease, were admitted at the San Lazaro hospital last week. The number exceeds the five-year median of 144 cases.

Health authorities advised the public to avoid crowded places and contact with pneumonia patients. All discharges and articles of the patient must be disinfected.

At the onset of high fever and chills, headache, cough and

fatigue, a person must have enough rest. An untreated cold or influenza may develop into pneumonia, health authorities warned.

If the cold persists, the patient should immediately consult a doctor.

The incidence of other diseases declined last week, the DIC said, judging from reports received from the San Lazaro hospital.

The number of diarrhea patients hospitalized at the SLH went down from 217 a week before to 201 last week. Typhoid fever cases also dipped from 19 to 18 cases; and measles patients, from 70 to 64 cases.

CSO: 5400/5700



PNEUMONIA TOP KILLER IN VISAYANS

Manila BULLETIN TODAY in English 24 Jul 82 p 18

[Text]

CEBU CITY — Pneumonia is now the top killer in Central Visayas beating the once-dreaded tuberculosis of "white plague" by about three to one, according to regional health authorities here.

Of the total projected population of 3.8 million in the provinces of Cebu, Negros Oriental, Bohol and Siquijor, more than 470,000 were reported to have contracted the ailment and more than 15,000, or about 33 per cent, succumbed to the disease last year.

The other leading causes of death of inhabitants in the region are heart disease which comes second, followed by senility or old age and ill-defined ailments, then all forms of tuberculosis which ranked fourth, and malignant neoplasm or cancer.—(H. D. Embrado)

CSO: 5400/5700

# GOITER CASES RISING

Manila BULLETIN TODAY in English 20 Jul 82 p 24

[Article by Marcia C. Rodriguez]

[Text]

Goiter, a disease caused by iodine deficiency and one of the most common forms of malnutrition, has afflicted a considerable number of school children and women in the country, a health official disclosed yesterday.

Dr. Gloria P. Guevara, national goiter program coordinator, said the incidence of goiter is particularly high in seven provinces in the highlands of Regions 1 and 2.

These areas are Benguet, Ifugao, Kalinga-Apayao, Cagayan, Pangasinan and Ilocos Sur.

A survey on the prevalence of goiter, Guevara said, has shown that 20 to 90 per cent of the population of school children and female adults in many areas of the country

have goiter.

Goiter is said to be endemic and a public health problem in these areas.

Persons afflicted with goiter are characterized by enlarged thyroid glands, lethargy, and sluggishness.

Guevara noted that endemic areas in Regions 1 and 2 are now receiving assistance from the goiter control program of the Ministry of Health.

With the assistance of the national nutrition council (NNC), the goiter control program supplies iodized oil ampules and iodized salts in areas where iodized salt is scarce.

The iodized oil injection is being used to treat vulnerable groups particularly women of child-bearing age because of the danger of giving

birth to cretins or babies with deformities due to thyroid deficiency.

Cretins are mentally retarded children and deaf-mutes lacking neuro-muscular coordination.

The use of iodized salt is highly recommended for the whole population both as a curative and preventive measure against endemic goiter. It is made readily available in rural health units, supplementary feeding center, and barangay health stations.

Nutrition education is also being emphasized with particular stress on the regular use of iodized salt and the increased consumption of iodine-rich foods such as seafoods, seashells and seaweeds.

CSO: 4220/253

MALARIA MOSQUITO CAMPAIGN URGED

Manila BULLETIN TODAY in English 18 Jul 82 p 36

[Text] Asean health experts have urged malaria unit of the Ministry of Health to launch a campaign against malaria mosquitoes in Mindoro, Palawan, Samar, and other provinces of Mindanao.

They made this suggestion because of the reported prevalence of the disease carrier in the areas.

They noted that mosquitoes multiply in rivers, stagnant ponds, creeks, and swampy areas by the millions, and are not only prevalent in this country but also in Thailand, Burma, Borneo, Malaysia and other tropical countries in the world.

A study indicated that malaria claimed more than 100,000 lives in those countries since World War II.

The experts also suggested several measures to combat the disease, including spraying stagnant ponds, creeks, rivers and swampy areas with DDT; total involvement of the community in the malaria drive, and setting aside a substantial fund for health program. (FTF)

CSO: 5400/5697

## PHILIPPINES

### BRIEFS

DIARRHEA CASES UP--A total of 217 persons suffering from diarrhea were hospitalized last week at the San Lazaro hospital (SLH), the disease intelligence center (DIC) reports showed. The number of diarrhea admissions rose from last week's 179 cases but still remained below the five-year median of 443. Majority of the cases came from Metro Manila while only 14 patients came from surrounding provinces and cities. Hospital admissions due to communicable diseases such as typhoid fever, measles, H-fever, and diphtheria likewise took an upward trend. At the SLH, 70 cases of measles, 44 diphtheria cases and eight H-fever cases were admitted. The DIC reported that these levels exceeded the five-year median of the respective diseases. Health authorities cautioned the public to clean their surroundings and to keep food and water containers covered and clean. Water from unsafe sources such as artesian wells or rivers must be boiled before drinking or washing the hands. Patients suffering from diarrhea may obtain oral rehydration solutions (Oresol) from health centers to treat the disease. [Text] [Manila BULLETIN TODAY in English 16 Jul 82 p 8]

CSO: 5400/5685

## SOUTH AFRICA

### BRIEFS

**POLIO DEATHS IN GAZANKULU**--Two more people have died of polio in the Gazankulu area. A spokesman for the Department of Health in Pretoria said yesterday another four cases had been reported, bringing the total number of children hospitalised since the outbreak of the disease to 258. The latest deaths were at Letaba Hospital where 18 children have died from polio. The spokesman said no more polio cases had been reported inside South Africa and the disease still appeared to be concentrated in the Gazankulu area. Updated figures on the typhoid outbreak were available, the spokesman said, but the Deputy Director-General of Health, Dr James Gilliland and other top officials at the department were in Durban and would be available only next week.--Sapa [Text] [Johannesburg THE CITIZEN in English 30 Jul 82 p 9]

**EFFECTIVE ANTI-POLIO CAMPAIGN**--Polio immunisation seemed to be taking full effect after a massive immunisation campaign in the northeastern Transvaal about three weeks ago, Dr James Gilliland, Deputy Director-General of Health, said in Pretoria yesterday. The polio vaccine takes about three weeks to attain the desired effect and is responsible for the decrease in the incidence of the disease. Only one new case, in Giyani, has been reported. The patient was admitted to the Nkhensani Hospital. Since the outbreak of the epidemic at the end of March, 254 children had been hospitalised with the total number of deaths standing at 25. On typhoid, Dr Gilliland said the epidemic seemed to have stabilised to a large extent and no new cases had been reported. Of the five patients currently at Kalafont Hospital, four are improving while one is still critical. [Text] [Johannesburg THE CITIZEN in English 28 Jul 82 p 12]

CSO: 5400/5702

BRIEFS

DIARRHOEA OUTBREAK WARNING--Municipal health authorities who have observed an outbreak of diarrhoea in Colombo and its suburbs during the last 15 days have cautioned the public to use only boiled cooled water for drinking to avoid consuming food exposed to dust and flies and also raw foods unless thoroughly washed with clean water. According to reports reaching the Chief Medical Officer of Health Colombo Municipal Council, out of 385 cases admitted to the fever hospital, Angoda between June 30 and July 11th 225 persons were from the city. These sources said the majority of them were from Madampitiya, Grandpass, Modera, Mattakkuliya, Borella, Maradana and Dematagoda. Residents of Colombo North in particular are advised that tap water too, should be boiled before use. The organism causing this outbreak of dysentery has been identified as belonging to Shigella-Shiga Type 1 which is known to cause severe diarrhoea and does not generally respond to the common anti-diarrhoeal drugs. The disease is spread through infected food and water. [Text] [Colombo DAILY NEWS in English 15 Jul 82 p 8]

MALARIA EPIDEMIC REPORTED--Malaria epidemic is rising its ugly head in Galwewa area according to a large number of patients coming to Galewela hospital and private clinics for treatments. About 10 positive Malaria cases have been traced in Pattiwela area. [Text] [Colombo THE ISLAND in English 17 Jul 82 p 2]

FLU, BRONCHITIS EPIDEMIC IN COLOMBO AREA--The epidemic of influenza and bronchitis that has hit the city and its suburbs has been magnified by the high level of air pollution in these areas. According to several medical experts the epidemic which started off as a common cold and cough has spread rapidly due to the weakening of human immunity through constant exposure to high levels of atmospheric pollution. The epidemic which is one of the worst on record is chiefly affecting children and infants. The problem is very serious, one expert pointed out, and unless measures are taken to curb the poisoning of our atmosphere the consequences would be disastrous. [Text] [Colombo SUN in English 20 Jul 82 p 1]

SHIGELLA VIRUS SPREAD REPORTED--The health authorities yesterday confirmed that the diarrhoeal virus spreading through the city was a virulent virus "Shigella" introduced from the Maldive Islands. This virus, according to Colombo's Chief Medical Officer Dr Trevor Peries is even more virulent than

the strain of cholera El Tor that the city was subjected to a few weeks previously. Dr Peries told 'SUN' that although every possible measure had been taken to contain the spread of the disease it continued unabated, especially in the slum areas in the city. The authorities, he said, were very concerned about the introduction of disease from neighbouring countries via tourists, but added that there was nothing that could be done to prevent it. Shigella is an extremely virulent virus which cannot be contained by common antibiotics. Several hundred victims have been warded at the Infectious Diseases Hospital while the health authorities sent out warnings against the consumption of uncooked food and unboiled water. [Text] [Colombo SUN in English 20 Jul 82 p 1]

HEPATITIS HITS NAWALAPITIYA--Nawalapitiya--There is a widespread increase of Hepatitis and Malaria in this area. Daily several patients are being admitted to the Nawalapitiya Base Hospital and also many are treated by private doctors. (0045) [Text] [Colombo SUN in English 12 Jul 82 p 12]

CSO: 5400/5687

## HEALTH MINISTER NOTES INCIDENCE OF VARIOUS DISEASES

Dar es Salaam DAILY NEWS in English 17 Jul 82 p 1

[Excerpts]

He added that the general environmental condition in the country was not satisfactory and hygienic enough despite Ministry efforts towards improving it.

He noted that because of this situation, killer diseases like cholera were still affecting several regions in the country. For instance, since the disease broke out in October 1977, some 29,228 people had contracted the disease — killing 2,404 people. The deaths were 8.2 per cent of the number of the affected people.

The Minister said despite efforts by the Party and Government to fight against the spread of the disease, the epidemic was still rearing its head in Mbeya, Kigoma, Shinyanga, Mwanza, Mara, Dodoma, Morogoro, Kilimanjaro and Tanga regions.

However, Dr. Chiduo said cholera had been completely wiped out in Lindi, Mtwara, Ruvuma and Kagera regions. It was possible to completely eradicate the disease when people adhere to cleanliness and dropped some of their customary and traditional

habits.

On typhoid, Dr. Chiduo reported that the disease broke out in Kigoma, Kilimanjaro, Coast and Dodoma regions last year, where some 195 people were affected. No deaths occurred.

Dysentery had killed some 125 people out of 12,423 cases in Kagera, Kilimanjaro, Coast Dodoma, Dar es Salaam, Arusha and Tanga regions, he said.

The Minister also said that there had been considerable training of experts in tuberculosis (TB), and a lot of TB detection equipment had been distributed to hospitals, dispensaries and health centres. In the next five years, he said, emphasis would be placed upon ensuring that all treated TB cases were completely cured.

Ndugu Chiduo also said efforts would be made to treat new TB cases before they turned malignant. Last year, new TB cases stood at 11,880 when compared to 10,191 in 1980, he added. New leprosy cases were 3,295 last year, compared to the previous year's 4,471.



DENMARK

BRIEFS

RABIES PROGRAM ENDING--The Veterinary Directorate has recommended to the agricultural minister that the program to combat canine rabies be ended as of 1 October 1982. The background for the recommendation is that since the beginning of 1981 no cases of rabies have been found among foxes in the South Jutland area that was formerly affected by the disease. It is expected that the Agricultural Ministry will take up the recommendation very quickly and cancel the former rabies proclamation. [Text] [Copenhagen BERLINGSKE TIDENDE in Danish 15 Jul 82 p 2] 6578

CSO: 5400/2187

## TUBERCULOSIS, OTHER DISEASES FOUND IN ZOO ANIMALS

New Delhi PATRIOT in English 12 Jul 82 p 3

[Text] A number of animals in the country's zoos, including Delhi, national parks and wildlife sanctuaries are afflicted with tuberculosis and other dreaded diseases, reports UNI. This is the finding of a national survey of mortality of wild animals conducted by a team of scientists of the Indian Veterinary Research Institute, Izatnagar, Bareilly. The team arrived at this conclusion after examining post-mortem records of 15 zoological parks, two national parks, eight wildlife sanctuaries and reserve forests in five States.

According to the scientists, deaths due to TB were recorded in several species of animals and birds. The disease was fairly common among spotted deer, primates, tigers, black bucks bears and pheasants.

According to the scientists, the study of wildlife diseases was important in today's context, as these diseases not only reduce wildlife population, but also because of their possible impact on the health of domestic animals and hazards for human health.

Apart from TB, rinderpest and anthrax took the toll of many animals. Rinderpest was recorded as a major cause of death in Gaur in the Hyderabad and Mysore zoos. Cases of anthrax were recorded in many species of animals including carnivores. A major outbreak of this disease was recorded in the Kohima zoo in 1975-76. Contaminated food was supposed to be the source of infection.

A viral disease called feline enteritis was recorded in the case of lions and leopards. A suspected case of rabies affecting an elephant was reported from the Jalpaiguri zoo. Canine distemper was recorded in a lesser panda belonging to the Delhi zoo.

The specific diseases reported among wild birds were Newcastle disease in owls and pheasants, fowl pox in turkeys and mynahs and TB in jungle fowl, ducks and cranes.

Tape worm infection was widespread in almost all wild animals like spotted deer, hog deer yak, nilgai, gaur, chinkara wolf and others were reported to be suffering from other types of parasitical diseases also. General debility, anamia, enteritis pneumonia and hepatitis were prevalent in reptiles, the survey said

## BRIEFS

FOOT-AND-MOUTH DISEASE CONTROL EFFORT--Since 25 May 1982 veterinarians of Vientiane Province along with cadres of the Veterinary and Animal Husbandry Department, Ministry of Agriculture and veterinary cadres in many different districts, are working together to determinedly give shots for protection against disease and epidemics to domestic animals owned by the people in the people's production bases within Vientiane Province. After the attentive and beautiful performance of their work these specialized task cadres were able to succeed 100 percent in injections against diseases for domestic animals owned by the people in Paksan and Toulakhom Districts, where 1,197 buffalos and 658 oxen were injected with anti-foot-and-mouth disease shots, and 89 pigs were given anticholera shots. Meanwhile, they have successfully treated a total of 157 sick buffalos, oxen, and pigs with different epidemic diseases. The reason for this is to maintain good health in animals owned by the people so they will be able to take part in a good outcome for this rainy season's production and also to ensure an increase in food supplies. At the present time these veterinarians are enthusiastically continuing their work in many other districts within Vientiane Province. [Text] [Vientiane VIENTIANE MAI in Lao 14 Jun 82 p 1] 9884

SAVANNAKHET VETERINARY WORK--(KH.P.L.) In response to the needs of farmers who are actively getting ready to get down to work in their ricefields in time for the cultivating season, on 14 May the veterinary and animal husbandry unit of Savannakhet Province sent 578 kg of medicines for preventing many different kinds of epidemic diseases in animals to the veterinary unit of Atsaphangtong District. These medicines were to be injected for protection against diseases to animals owned by farmers in many regions in which epidemic diseases in animals often occur in the rainy season, and consisted of the medicines for pasteurellosis, anemia, etc. These district veterinarians are now working together with regional administrative authorities in different cantons around their district to actively accelerate the giving of injections to prevent diseases in animals owned by the people. This is to protect the health of domestic animals and to ensure draft labor so they can take part in a good outcome for this year's rice production. [Text] [Vientiane KHAOSAN PATHET LAO in Lao 21 May 82 p A6] 9884

CSO: 5400/5661

HEMORRHAGIC SEPTICEMIA REPORTED IN KELANTAN STATE

Kuala Lumpur NEW STRAITS TIMES in English 30 Jun 82 p 19

[Text]

KOTA BARU, Tues. —  
Kelantan has been placed on alert against the spread of a deadly disease which has so far killed 80 head of livestock in Machang District.

The State Director of Veterinary Services, Dr Abdul Aziz bin Magkat, said today that the department had prepared enough vaccine to check the spread of the *haemorrhagic septicemia* — the disease which affects the throat of the livestock. He said efforts were being made to vaccinate the livestock throughout the Machang District.

But, the reluctance of farmers to get the animals vaccinated has affected the Veterinary Department's programme. So far, only 1,000 of the 16,000 head of livestock in the district have been vaccinated.

Dr Abdul Aziz said the farmers did not want to report the deaths to the authorities because they feared it might affect the sale of the unaffected livestock.

Dr Abdul Aziz said that the last time the disease struck Kelantan was in the Seventies. He warned that the disease would kill the livestock within hours of its attack.

CSO: 5400/8427

## NICARAGUA

### MEASURES BEING TAKEN TO COMBAT CATTLE DISEASE

Managua EL NUEVO DIARIO in Spanish 1 Jul 82 p 16

[Article: "The Fight Against Parasitic Worms in the Region Will Cost \$121 Million"]

[Text] The Land and Cattle Ministry started a campaign in Nicaragua to eliminate the Gusano Barrenador parasitic worm from the cattle moth borer (Torsalo). The campaign will be conducted throughout Central America and Panama.

It is being implemented by the Inter-American Institute of Agricultural Sciences (IICA) and the Inter-Regional Organization for Plant and Animal Health (OIRSA), together with the Ministry of Agriculture of each country--in the case of Nicaragua, with the MINDINRA [Ministry of Agricultural Development and Agrarian Reform].

Preparations regarding the present campaign in Nicaragua consist of a theoretical and practical course for doctors, veterinarians, and zootechnicians who in the future will be in charge of the campaign along with IICA and OIRSA consultants.

Nicaraguan technicians are being trained to spot and identify adult flies and the larvae of the parasitic worm and are given information on the chief ways to control that peril.

Referring to methods of controlling the pests, Dr Roberto Rivera Crespin, of OIRSA, indicated that one way is to free sterile flies, a biological control that consists of freeing a specified number of previously sterilized flies, treated for this purpose. This system has been used in Mexico for 6 years and ends this year.

#### 200 Traps

In this connection, a study will be conducted on the dynamics of the population of this fly during a 6-month period. Two hundred traps have already been installed throughout the country for the purpose of collecting flies. It is expected that by 1983 the process of freeing sterile flies in Central America will begin, in accordance with the studies carried out in the region. The aim is to attain a 10 to 1 proportion of sterile flies in order to eliminate them gradually and to conclude the program in 5 years.

Another control method mentioned by Dr Rivera is the SWAS, that is, the spreading of "pelex" saturated with an insecticide that tends to decrease the population of flies in the field. This is to be combined with the freeing of sterile flies.

There are also methods of irrigation and control of the transit of animals to safe zones.

121 Million

Regarding the costs of the 5-year program, Dr Jose Ferrer, of IICA, indicated that, according to studies made of the campaign, it has been estimated that the elimination of the pests in the region will cost approximately \$121 million.

He added that the financial aspect has not yet been settled, but that all of the countries involved in these programs will cooperate according to their means.

He said that currently the cost of the control of that problem in Nicaragua is 3 million cordobas a year for larvicides and other products alone, not counting the losses in pelts, the decrease in milk, and the loss of the afflicted animals, themselves.

8255

CSO: 5400/2188

EFFORTS TO HALT CATTLE DISEASES REPORTED

Colombo DAILY NEWS in English 9 Jul 82 p 6

[Text] Two special projects have been launched by the Department of Animal Production and Health, which comes within the purview of the Ministry of Rural Industrial Development.

They will control and arrest contagious cattle diseases in Dry Zone areas of the country.

Hoof and mouth disease, a highly infectious cattle disease, which is endemic in the east coast of the country, has been successfully controlled.

A special vaccination program being concluded in Polonnaruwa, Amparai and Batticaloa districts has achieved this.

This program commenced in early March this year and so far 61,432 animals exposed to infection have been successfully vaccinated.

According to Dr A. S. Abeyratne, Deputy Director, Animal Production and Health, Peradeniya, and Dr (Miss.) S. Balasubramaniam, Veterinary Surgeon of the same department Haemorrhagic Septicemia can also be controlled.

This is another highly infectious cattle disease, which can be fatal, and normally occurs in Anuradhapura, Polonnaruwa and Kurunegala districts.

In this connection, an intensive vaccination program was carried out from early last month.

All cattle owners have been requested to contact the nearest government veterinary surgeons and get their cattle vaccinated free of charge.

CSO: 5400/5687

# SECRETARY ZULU DISCUSSES CATTLE DISEASES PREVENTION, VACCINES

Lusaka DAILY MAIL in English 24 Jul 82 p 1

[Excerpt]

THE GOVERNMENT is working out measures aimed at eradicating foot and mouth disease, Secretary of State for Defence and Security, Mr Grey Zulu said yesterday.

And to ensure complete eradication of the disease, Mr Zulu also directed district councils to mobilise people in the construction and use of dip tanks.

Officially opening the Southern Province agricultural and commercial show in Monze, Mr Zulu said the government was concerned about the outbreak of corridor disease in the province and revealed that 696,000 doses of vaccine were already in the country and vaccination campaign of cattle in the affected area had started.

Mr Zulu, who stressed that the disease would not spread, also assured cattle owners that vaccines for other diseases such as quarterevil and haemorrhagic septicaemia were now manufactured in

Zambia at the Central Veterinary Research Laboratory in Lusaka.

On dip tanks, Mr Zulu said Southern Province had 141 out of which 65 were communal and not properly utilised due to lack of dipping materials and urged district councils to encourage the formation of dip tank committees or livestock co-operatives at ward level adding that co-operatives at village level were also essential if self help projects were to be realised.

"A village co-operative can mobilise resources required for better animal husbandry. Construction of dip tanks and paddocks and the purchasing of dip chemicals and drugs can be carried out by the people."

He noted that traditional cattle owners could easily afford their own dip tanks and chemicals instead of waiting for government to assist them.



# COLORADO BEETLES FOUND IN POTATO FIELD

Copenhagen BERLINGSKE TIDENDE in Danish 16 Jul 82 p 5

[Text] The State Plant Control Agency has received the first report of an infestation of Colorado beetles [*Leptinotarsa decemlineata*] in a potato field.

Two adult beetles and some larvae were found in a potato field in Lille Jyndevad near Tonder. But the Plant Control Agency believes this is a case of so-called "tourist beetles" that have been brought to Denmark by the warm southeasterly winds and that therefore there is little danger of a massive Colorado beetle outbreak.

The beetles are found in large numbers in the German Democratic Republic and in Poland and attack potato plants and tomato plants in particular.

Denmark is trying to maintain its status as an area free of Colorado beetles, which can be important for plant exports.

Henning Andersen, a section leader with the State Plant Control Agency, said that a few dead and living Colorado beetles have been found in Sonderjylland this summer, but that this is the first time an infestation has been found in a potato field.

In 1981 there were practically no Colorado beetles and the State Plant Control Agency does not expect serious attacks this year either, among other reasons because the fall and winter were very damp in the areas where the beetles come from.

The last serious infestation was in 1972, when large parts of southern Sweden and southeastern Denmark were affected.

The beetles can be effectively combatted with insecticide sprays.

6578

CSO: 5400/2187

DENMARK

BRIEFS

MINER FLIES THREATEN CROPS--Sweden will probably follow Norway and Finland in imposing an import ban on plants infested with miner flies. This will affect Danish chrysanthemum growers and the matter may be brought up before the EC Commission and the customs organization, GATT. The larvae of miner flies attack flowers like chrysanthemums and gerbera in particular, but they also attack cucumbers, lettuce and tomatoes. [Text] [Copenhagen BERLINGSKE TIDENDE in Danish 15 Jul 82 p 2] 6578

CSO: 5400/2187

BRIEFS

LOCUST SWARMS DESTROYED--A locust infestation in Baluchistan has been completely controlled and the situation brought back to normal, it was officially stated in Karachi. The Department of Plant Protection has established 12 sub-outposts, two each in Tharparkar, Nara, Rahimyar Khan and Bahawalpur and three in Lasbela districts and one in Khipro to keep strict watch on the development of summer breeding zones. The staff from these sub-outposts as well as from seven main outposts, namely, Mirpurkhas, Sukkur, Rahimyar Khan, Bahawalpur, Dera Murad Jamali and Uthal are conducting regular survey to detect any development of locust situation and undertake control measures immediately. Besides, one aircraft is being based at Chhor and one at Rahimyar Khan. The locust outposts/sub-outposts are equipped with manpower, wireless sets, survey vehicles, locusticides and are keeping strict watch on the development of locust to meet any eventuality.--APP [Text] [Karachi DAWN in English 18 Jul 82 p 4]

CSO: 5400/5698

PHILIPPINES

BRIEFS

LOCUSTS THREATEN LEYTE RICE CROP--Seventy-five percent of the rice crops of barangay San Isidro, Mahaplag, Leyte, have been destroyed by locusts. The locusts threaten other Leyte towns. [Text] [Manila PHILIPPINES DAILY EXPRESS in English 19 Jul 82 p 4]

CSO: 5400/5697

MELIGETHES AENEUS BEETLE DESTROYING RAPEOIL CROPS

Stockholm SVENSKA DAGBLADET in Swedish 28 Jun 82 p 6

[Article by Karin von Schenck]

[Text] The Meligethes aeneus beetle is ravaging central Sweden. Farms attacked by the beetle are anticipating crop losses of about 10 percent. It was the warm weather several weeks ago that caused the sudden attack.

Harmful insects and fungal diseases usually are not a major problem in Sweden compared to southern countries. Throughout the world one third of all crops are lost and in Africa and Asia the figure is about one half.

In Sweden losses amount to about 1,5 billion kronor annually if weeds are included.

Different countries have chosen different methods of reducing the damage. On the continent so-called planned spraying is common, whereby the fields are sprayed according to a predetermined schedule that is not affected by weather conditions or the extent of infestation.

In many cases this has yielded good results, but certain resistance also has arisen. The chemicals no longer alleviate the damage.

Reduce Quantities

The debate over pesticides in Sweden has had a great impact on farmers and their organizations. Most of them agree that insecticides spraying must continue if their farms are to be profitable, but they may find new ways to reduce the quantity of chemicals used in agriculture.

The Sundby farm in Tillberga near Vasteras is the home of Erik Brunfelter. He cultivates grain and raises pigs and has worked his farm for over 20 years.

He pointed to his rape field that should be yellow with blossoms, but was taken by surprise by the Meligethes aeneus beetle one sunny Saturday afternoon when he and his family were away for several hours.

## Explosion in the Heat

"The heat caused a population explosion among the beetles. They fly in over the field, crawl down into the blossoms, and eat them. The rape plant blooms again, but only after 3 weeks and more sparsely, more difficult to harvest."

"If we could not use pesticides against the beetle, we could not cultivate rape at all. It is not as profitable as wheat, but it is needed for crop rotation."

For many years rape cultivation declined precisely because pesticides are needed, but especially on farms without cattle, where plants for winter fodder are not cultivated, rape is needed for proper crop rotation which, in turn, is necessary for developing greater resistance against pests.

## Receptive to Criticism

Erik Brunfelter has been receptive to criticism of pesticide use, partly out of consideration of future generations that should inherit fertile soil, but also for the sake of his own health.

"If I were a cannibal I would not want to eat a farmer! But the chemicals we use today degrade rapidly and are used selectively."

A method of pesticide use that is better suited to actual needs is being tested at Arosbygden, which is the name of the farmers' union in Vastmanland-Uppland. It is based on control plots, a number of plots in various fields which are inspected continuously for insect and fungus attacks,

The number of aphids on wheat plants are counted, for example, and the rate at which they multiply is noted. Fungal diseases are observed and their development may be predicted based on weather conditions, etc. These observations are combined with reports from the School of Agriculture at Uppsala University and serve as the basis for a telephone service from which all members may receive predictions and advice on when and how suitable counter-measures may be implemented.

## Limit at 20 Aphids

Sten Skure is a farmer at the Vendle farm in Dingtuna near Vasteras. He belongs to a consulting group in which he and about 50 other farmers share the cost of a consultant who regularly inspects their crops and suggests steps that should be taken, but also helps follow up and analyze the results.

Several days ago an average of 0.2 aphids per wheat plant were found at Arosbygden. Just several days later the average was two aphids per plant.

When SVENSKA DAGBLADET visited the Vendle farm there were some plants with over 20 aphids, while others had none. On the other hand, there were signs of caterpillars.

At an average of 20 aphids per plant, pesticides may be used--otherwise the farmer's losses would be too great.

#### Well-Kept Land a Guarantee

Sten Skure believes that information and knowledge are the keys to using fewer pesticides while maintaining the same profitability. He is anxious to try new methods:

In other countries there are machines that have not yet been tested in Sweden. For example, there are sprays that work effectively with less water and about half the quantity of chemicals. There also are spray monitors that guarantee that the proper quantity will be used and indicate if the dosage is incorrect. Sometimes the size of the opening in the nozzles changes after spraying has been underway for a time.

Ultimately, taking good care of the soil yields the best results. Well-drained, well-harrowed, well-limed, and well-fertilized land in combination with fresh seed, as resistant to disease as possible provide the best results. If the crops grow under the best possible conditions, then they are less likely to suffer ill effects from disease and pests.

"In the long run, acidification may be an even greater problem," Erik Brunfelter said. "As long as we have the land we have now, we will have good crops. Heavy metals are not great problem, since the tolerance in our land is great."

"But with acidification, changes may occur rapidly and we know too little about the possible effects."

9336

CSO: 5400/2183

END